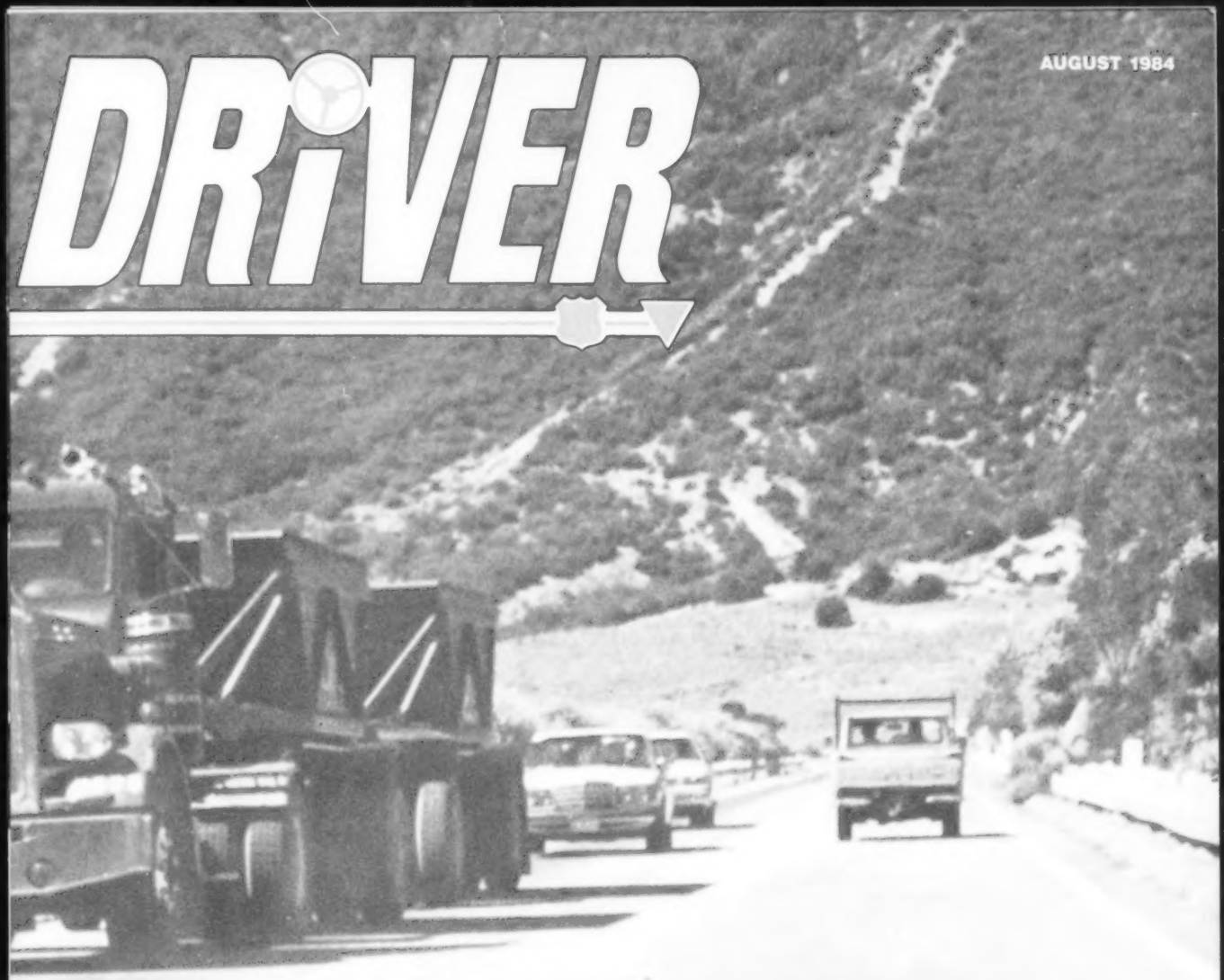
DRIVER

AUGUST 1984



GREAT GAME PLAN . . .

COMPLETED PASSES

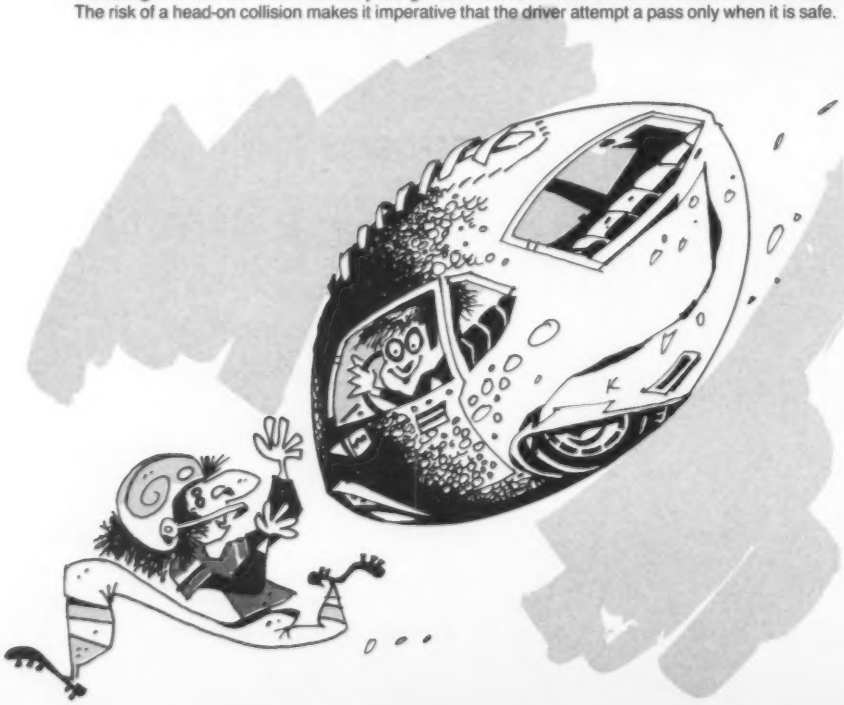
. . . QUARTERBACKING IN THE ROAD BOWL

The Backyard Mechanic

Chiefs and Indians

Driving at Lackland

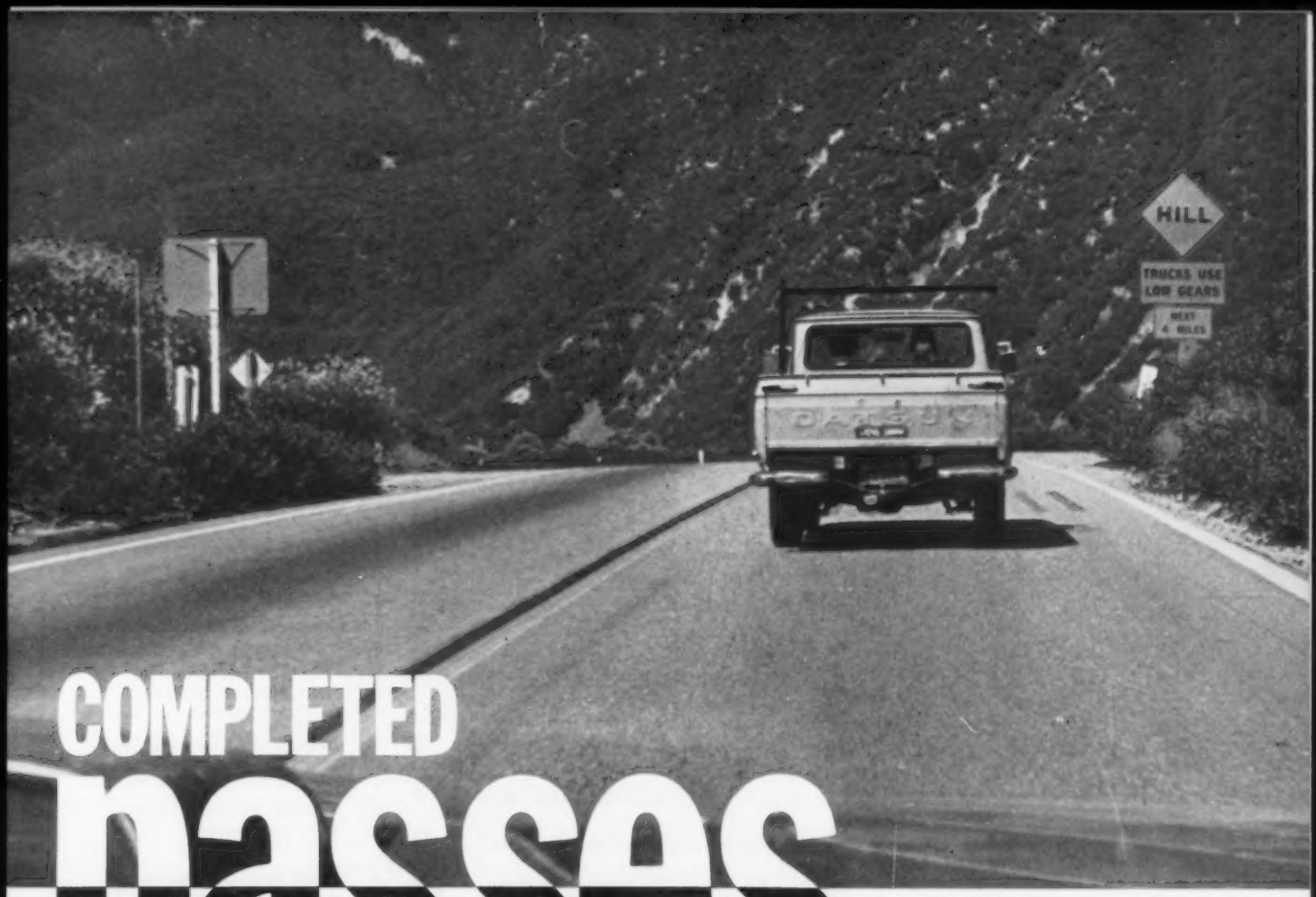
(above)
Passing another car is an extremely dangerous maneuver where there is much traffic around. The risk of a head-on collision makes it imperative that the driver attempt a pass only when it is safe.



Few things in football are as exciting as a play involving a pass. A pass enables the team, at some risk, to get toward the goal line faster. It gets the ball past the opposing players and, hopefully, allows the receiver a clear run to the goal line.

A pass in an automobile has a similar purpose. It enables the driver to get to the goal faster. It gets the car around some interfering vehicles and allows a clear road to the goal (or destination).

And, yes, there are some risks. You might have to face some obstacles. In football, the obstacles are players trying to stop the quarterback and get the ball. He has to avoid them. In driving, the obstacle is traffic going the other way. The drivers are not trying to run into you, and



COMPLETED passes

(above)
When you're nearing the crest of a hill, don't pass the vehicle ahead. Wait until you are on the downhill side, and pass it only when you have sufficient space.

they will try to avoid you as much as you try to avoid them. But they're moving very fast and have little room to maneuver.

The idea in both kinds of passing is to do the pass when you have the greatest possibility of success. In driving, those who are facing you are not really "opposition" but at highway speeds that doesn't matter. Being hit by a 3000 pound car is much more dangerous than being hit by a 250 pound linebacker.

Perhaps the best way to go about a discussion of passing is to list the conditions under which you should not pass another vehicle.

Incomplete pass: On the field, the quarterback will not pass unless he can see an open receiver. If he throws without a target, he risks an incomplete pass, or even an interception.

The driver has to see, too. If he can't see along the total path that the car must travel to pass another, he should not attempt to pass.

An example: Don't pass on a hill. The reason is simple enough. You can't see what is over the top of the next rise, maybe nothing or maybe a semi.

Also, don't pass on a curve. If the highway is in the mountains, you have the same problem as with hills — you don't know what is ahead. But even with a completely level road, passing on a curve isn't safe. The reason is the additional speed you have to apply to pass another car. This speed, plus the curve, could combine to put you out of control.

It is illegal to pass another car at an intersection. This is because you cannot tell what the car ahead of you will do. He might go straight, or turn without signaling. The cars on the intersecting road might also do something unexpected. Your actions might cause some other car to swerve to avoid you and collide with something else.

A special kind of intersection is the railroad crossing. You cannot pass another car here, either. Not only could your passing cause the other car to go off the road, but he might see something you don't. Like a train, for instance.

Also, in most places, it's illegal to pass another vehicle on a bridge or in a tunnel. We should mention that these rules apply when there is only one lane for traf-

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THE EDITOR SPEAKS

DOUBLE CLUTCH

NEW YORK IS FIRST

The state of New York enacted a mandatory seat belt law the end of June. It requires adults to wear safety belts in the front seats of automobiles.

Debate in the New York legislature was lengthy and followed the expected lines: Belts may save lives and prevent injuries but a law requiring their use is another invasion of personal freedom. The final vote in favor of the law was 82-60 in the Assembly and 38-22 in the Senate. By no means a landslide. Obviously, more than a few New York legislators felt that personal freedom was at issue here.

A year ago last January Great Britian became the 34th nation with a compulsory belt law. The law wasn't easy to pass there either — in fact, it took 14 years and seven tries — and invasion of personal freedom was a major argument against it, just as in New York. Mr. Berry Sheerman is the Member of Parliament who sponsored Britain's law. While visiting the Highway Users Federation in Washington, D.C. this spring, Mr. Sheerman discussed the logic that prevailed in his country:

"In almost every dimension of human life, liberty is a balance between total ability to do what you want and restrictions on the ability to do what you want. The good society is somewhere in-between.

"If you really want to go to the ultimate, you could say there should be no traffic lights, no restrictions on people taking heroin, and an individual should be able to commit suicide. At the other extreme, you have the state which interferes with everything people want to do. Somewhere in-between is the civilized society where sensible people know these things are a balance. . . .

"The British law is not permanent. We have it for five years, and if after five years it's a bad law, it hasn't worked, or there are some unwarranted spinoffs we didn't foresee, then the law will lapse. As good pragmatists, which I know American politicians to be, why not give it a try? If it's valuable, it will prove itself within three to five years."

According to the Highway Users Federation, such a law in every state of the U.S. would save about 12,000 lives a year, prevent 330,700 disabling injuries, and save more than $5.2 billion a year in medical and other costs.

completed passes

continued

You can pass a slow car if you have enough space clear of oncoming traffic. A pass will take 10 to 12 seconds to complete.

fic moving in your direction. If there are two or more lanes, passing on a hill or a curve is okay, if you do it with caution. You may *not*, however, change lanes in the middle of an intersection to pass another car. We'll get back to multi-lane roads later.

Out of bounds: The lines at the edge of the football field tell the players when they're out of bounds. A pass along outside these lines is no good. In a sense, the lines on the road tell the driver when he is "out of bounds." The lines are usually a good indicator of whether or not it's legal (and safe) to pass. A solid yellow line in your lane means "Do not pass." A broken, or dotted, line in your lane means "You may pass with caution."

On long, straight, level roads the line will be a dotted one, signifying that it's safe for traffic on either side to pass, if there are no oncoming cars. The solid lines are normally used where something limits the visibility, as on roads with hills or curves, like in the mountains. If you're approaching a hill or a curve, the solid line will appear in your lane some distance before you reach it, telling you there isn't enough visibility for a safe pass. At the crest of the hill, the line will begin in the other lane, and disappear from yours. At that point you can see, but the oncoming driver, who has yet to reach the crest, can't. Sometimes there's a solid line in both lanes, when it isn't safe for anyone to pass. (See the illustrations for a better idea of this.)

Always watch these lines, and obey them. They have been painted on by the highway department as an aid for you, based on the space necessary for you to pass safely. (The lines are also based on the visual range of a person at a certain height, as seated in his car. Drivers of low sportcars should keep this in mind as they watch the lines — they can't see quite as far as the driver of the larger sedan. However, we wouldn't want the drivers of higher vehicles — high-riser pickups, for example — to get overconfident. They should also follow the guidelines.)

Pass completion: Okay, we've probably given you enough preliminary cautions. Now we'll explain the "how-to" of passing.

It's simple. The quarterback cocks his arm and throws the ball at another player, who runs with it. In the car, you go into the opposing lane, accelerate, pass the guy ahead and get back into your own lane. And if you think it's that simple, go back and read the previous paragraphs.

Passing can be risky. The quarterback has a lot of opposing players to avoid, all of whom want the ball. You, the driver, have to watch for oncoming traffic, for entering traffic, for the movements of the car (or cars) you're passing, and for the movements of cars following you.

The first thing to do is to get to the safe following distance (two seconds behind the car in front of you) and match its speed. Then check the road ahead. Is there enough room for a pass, that is, can you see far enough, and are the opposing lanes clear? You will need 10 to 12 seconds to pass it.

If you can see far enough and there are

continued

(left)
When two or more cars are stuck behind a slow moving vehicle, the first one in line should pass first, because it has a shorter distance to travel in the opposing lane. Slow-movers are required to use the first available turnout to let the others by.

(right, top)
Passing a second vehicle on the same maneuver should be attempted only with the greatest care.

(right, bottom)
If an oncoming vehicle appeared at this point, the driver would be wise to drop back and pull in behind the truck.

no opposing cars, check your mirrors for cars following you. There might be someone behind you with the same idea; make sure nobody is attempting to pass you. Look over your shoulder to eliminate blind spots. Then, signal your intentions to anyone who's interested (flashing the lights and hitting the horn might also be a good idea). Turn on the left signal and move out into the opposing lane. Accelerate your car and pass the one ahead. Watch it as you pass; it might speed up or make some other movement if the driver hasn't seen you.

Now don't pull back into your own lane until you see the car in your inside rearview mirror. Give him room. Signal to the right and drive back into your original lane. Slow down if you're above the posted limit and continue on.

Pass interference: That was an easy pass. What could happen to interfere with it, to make it more difficult?

In football, pass interference means someone has hampered the quarterback from throwing. There are all kinds of interference on the road. The car you're passing could do something. If the driver hasn't seen you, or doesn't want you to pass, he could try to speed up. In this case, don't try to accelerate still further. Drop back and get back into the right lane. You can either try again later or keep back, depending on his reason for speeding up.

Oncoming traffic can also run pass interference. As we said, you need 10 to 12 seconds to complete the pass. If there are oncoming cars, you need more space. "How much?" is a good question. The American Automobile Association and some driving schools say that if you can detect movement in the oncoming car, it's too close; wait until it passes by.

The other category of car is also important — the one following you. That's why we said to check for its movements. If it has started to pass you, let it go by before you move. Even if it isn't even with your car yet, stay in place. If you try to pass ahead of it, you might rattle the driver's nerves and cause him to have an accident. It's also good to note here that just because you're being passed, don't assume it's safe for *you* to pass. The other driver may be a daredevil who likes close calls. Make your own decision, and make it on the basis of caution.

The road can also interfere. If you start to pass and then see a blind curve or hill coming up, drop back and return to the right lane. Another car could appear at any second. And again, watch the lines. If the solid line appears in your lane, drop back. It's there for a reason, perhaps something you can't see.

Also, drop back if there's anything lying in the opposing lane in your path — an animal, a tree limb or some trash, for instance.

The long bomb? In football, the more opposing players between the quarterback and his intended receiver, the greater the risk of interception. On the road, the more cars you have to go around on one pass, the greater the risk.

A line of cars strung out behind a slow moving vehicle creates special problems for the passer. First off, we'll mention that the slow-mover should get out of the way. If you're the slow one (say you're hauling a boat) and there is a turn-off designed for the purpose, as there often is on mountain roads, you should turn out and allow the others to pass before you get back on the road. It will save you from having 15 angry motorists honking along behind you.

If the conditions and the visibility make passing possible, the ones first in line should pass the slow car first. This isn't for courtesy, it's for safety. The first car behind the slow car has only one car to pass, and it can do it quickly and easily. Those farther back have two, three or more cars to pass, which increases the time necessary for the pass, and increases the chance that something will interfere.

However, there are times when this is also necessary. If you're third in line behind a slow-moving motorhome and the two drivers ahead are too timid to pass, you might want to get out of there. But be very careful as you pass — one of those ahead may get the courage to

continued

(above)
Although this truck is moving slowly, the driver should not pass until he is around the curve and can see what is coming downhill.

(right)
Especially slow-moving traffic, such as road equipment, may be passed, but wait for the equipment driver to signal that it's okay.

(below)
Do everything you can to allow a passing car back into line if it is facing oncoming traffic. Slow down and squeeze to the right to give the car room to merge.

pass just a second after you do, and may collide with you. Watch them very carefully.

Let's take this a step further. As you pass the two cars ahead, you see an oncoming truck that is too close to allow you to complete the pass of the motorhome. Drop back to your original position and get back in line. Trailing traffic will probably slow down to give you a gap to slip into, or leading traffic may speed up, if they can. Or they might squeeze to the right to allow you some space to get through.

Note the "probably" and "might." There's no guarantee in these cases, so you must always give yourself a way out. Avoid a head-on collision with another

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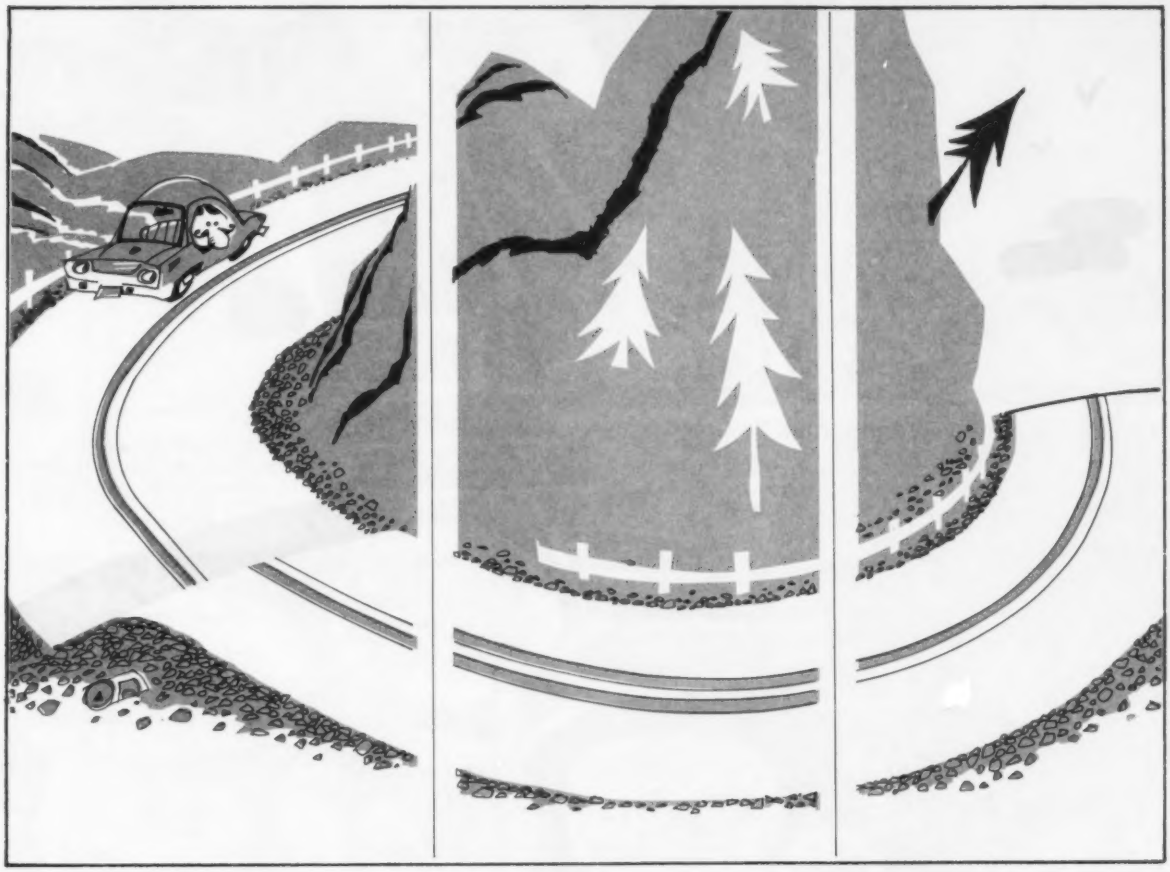


A solid line in your lane means it is not safe for you to pass.

Solid lines in both lanes means no car can pass from either direction.

When the solid line is in the other lane, you may pass but oncoming traffic may not.

vehicle at *all* costs, because this is the most dangerous kind of accident.

If you are one of the cars in the line and someone else is facing the truck, open a gap for him to get back in line. Think how you'd feel in his place. Ditto, if you're the one in the truck — squeeze to the right and give him as much room as possible.

Lateral pass: A lateral is a pass parallel to the line of scrimmage. Passing on a four-lane highway could be called a lateral pass, too. In contrast to the past examples, this kind of pass is a snap. You don't have to face opposing traffic, which eliminates the problem of needing a 10 to 12 second gap. You just signal, move into the next lane and go ahead. The four-lane roads even make allowances for slower vehicles — those cars are supposed to use the right lane and leave the left lane for faster cars, or cars that want to pass them.

The chief problem in multi-lane roads may be the ease of passing, or more specifically, the safety the driver feels in passing. Many cars have been sideswiped, and many more have been *almost* sideswiped, by drivers who didn't look around them enough to make sure a lane change was safe.

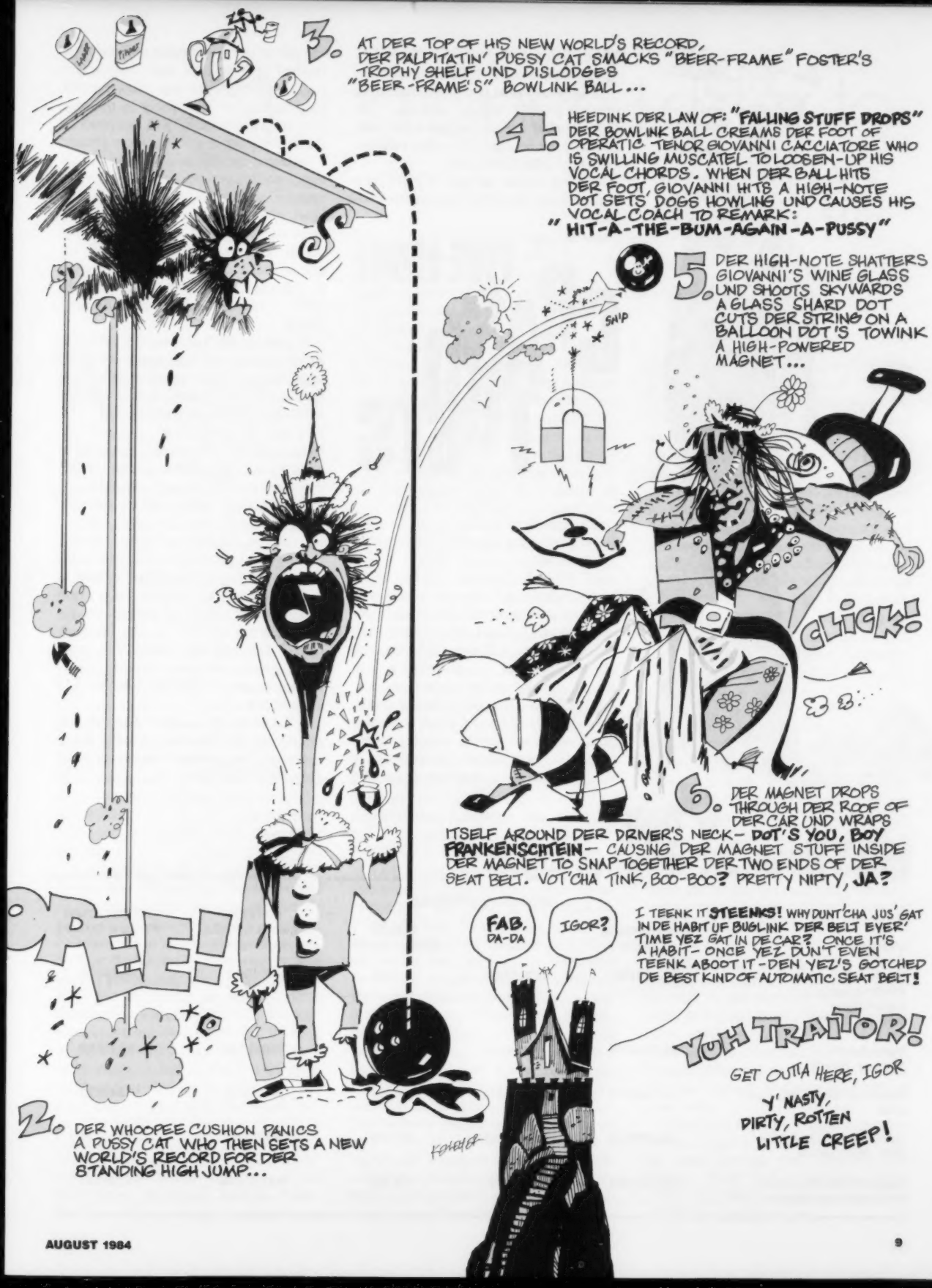
Always look around you to make sure nobody is overtaking you in the lane you want to enter. Always signal for that lane change (and always remember to cancel the signal after the change is complete).

Do your passing on the left, whenever you can. If you move to the left around a slow car and find another slow car in the left lane, flash your lights at him or sound your horn to get him to move over to the right and allow you to pass. Although passing on the right on a multi-lane road isn't illegal, it could be seen as weaving in and out of traffic by the police.

Driving on multi-lane highways was covered in more detail in "Freeway Star," August 1982 DRIVER.

What's passed is prologue: We hope the past discussion has helped your understanding of a tricky vehicle maneuver. May all your passes be complete, with no interceptions.

'EY, BOY FRANKENSTEIN! VOT'S DUH MADDA? YOU BIN IN ANODDER CAR WRACK?
YES, IGOR, YOU NASTY, DIRTY, ROTTEN LITTLE CREEP! IT'S THOSE *!!*# SEAT BELTS! I CAN NEVER REMEMBER T' MAKE 'EM CLICK. ...WENT THROUGH THE WINDSHIELD THIS TIME — TORE M' NEW DRESS, SMEARED M' MAKEUP — RUINED M' WHOLE DAY!
WHERE'S THE DOCTOR? I NEED A NEW FOOT
the AUTOMATIC SEAT BELT
(with a salute to Rube Goldberg)
OL' DOC, HE DOWN IN DE BASEMENT. OL' DOC, HE INWENTIN'... YOU FOLLER ME, BOY FRANKENSTEIN...
INVENTING? WHAT'S HE INVENTING, IGOR? ...YOU NASTY, DIRTY, ROTTEN LITTLE CREEP.
BUT NOT TO WORRY, BOO-BOO, MY NEW INWENTION WILL SOLVE ALL YOUR CLICK-CLICK, BUCKLE-BUCKLE PROBLEMS...
...IT FIGURES... BRAINS MIT SCHMARTS WERE HARD TO DIG-UP THE DAY I PUT YOU TOGETHER.
IN FACT, YOU'RE JUST VOT I NEED TO TEST THE THING. LURCH ON OVER UND WE'LL TRY-OUT MINE NEW AUTOMATIC SEAT BELT...
A DAB OF THIS... A PINCH OF THAT... TRA-LA-LA LA-LA
HAB
DON'T TOUCH ME, IGOR, YOU NASTY, DIRTY, ROTTEN LITTLE CREEP!
YOU LOOK TERRIBLE, BOO-BOO! ... DIDN'T BUCKLE-UP AGAIN, JA?
PATENT PENDINK
DA-DA!
BOY FRANKENSCHTEIN! MINE KINDER!
BOY! BOY! GA! GA! FOOT! FOOT!
WHO
FOIST, YOU SITTEN ZE DOWN IN DER CAR SEAT UND ACTIVATE DER WHOOPEE CUSHION...


3. AT DER TOP OF HIS NEW WORLD'S RECORD, DER PALPITATIN' PUSSY CAT SMACKS "BEER-FRAME" FOSTER'S TROPHY SHELF UND DISLODGES "BEER-FRAME'S" BOWLINK BALL...
4. HEEDINK DER LAW OF: "FALLING STUFF DROPS" DER BOWLINK BALL CREAMS DER FOOT OF OPERATIC TENOR GIOVANNI CACCIATORE WHO IS SWILLING MUSCATEL TO LOOSEN-UP HIS VOCAL CHORDS. WHEN DER BALL HITS DER FOOT, GIOVANNI HITS A HIGH-NOTE DOT SETS DOGS HOWLING UND CAUSES HIS VOCAL COACH TO REMARK: "HIT-A-THE-BUM-AGAIN-A-PUSSY"
5. DER HIGH-NOTE SHATTERS GIOVANNI'S WINE GLASS UND SHOOTS SKYWARDS A GLASS SHARD DOT CUTS DER STRING ON A BALLOON DOT'S TOWINK A HIGH-POWERED MAGNET...
SNIP
CLICK!
6. DER MAGNET DROPS THROUGH DER ROOF OF DER CAR UND WRAPS ITSELF AROUND DER DRIVER'S NECK- DOT'S YOU, BOY FRANKENSCHTEIN- CAUSING DER MAGNET STUFF INSIDE DER MAGNET TO SNAP TOGETHER DER TWO ENDS OF DER SEAT BELT. VOT'CHA TINK, BOO-BOO? PRETTY NIPTY, JA?
FAB, DA-DA
IGOR?
I TEENK IT STEENKS! WHY DUNT'CHA JUS' SAT IN DE HABIT UF BUSLINK DER BELT EVER' TIME YEZ SAT IN DE CAR? ONCE IT'S A HABIT- ONCE YEZ DUN'T EVEN TEENK ABOOT IT - DEN YEZ'S GOTCHED DE BEST KIND OF AUTOMATIC SEAT BELT!
YUH TRAITOR!
GET OUTTA HERE, IGOR
Y' NASTY, DIRTY, ROTTEN LITTLE CREEP!
OREE!
2. DER WHOOPEE CUSHION PANICS A PUSSY CAT WHO THEN SETS A NEW WORLD'S RECORD FOR DER STANDING HIGH JUMP...

FIVE MORE CRASH TESTS

The National Highway Traffic Safety Administration (NHTSA) recently released results of five more crash tests involving 1984 motor vehicles. The federal safety agency had previously announced the results of 23 other vehicles (see July 1984 DRIVER).

The test results are part of NHTSA's experimental New Car Assessment Program. Results of crash tests on 10 other 1984 vehicles are expected to be released this summer.

All the vehicles were crashed at 35 mph into a fixed barrier in frontal tests designed to indicate relative levels of occupant protection and vehicle safety performance. This is 5 mph faster than the prescribed speed for compliance with federal motor vehicle safety standards.

NHTSA said that while the test results are indicative of relative crash protection provided to occupants wearing safety belts, it is important to emphasize that in the government crash test program only one car of any given make and model is crashed in a specific test. Subsequent crash test results for any vehicle could vary because of differences in the way cars are manufactured and equipped or due to slight variations in test conditions.

Instrumented dummies are used in all tests, and they are protected by the vehicles' standard safety belt system. The head, chest and upper legs of the dummies are equipped with instruments which monitor impact forces and accelerations. The head acceleration is used to calculate the head injury criteria (HIC), a measure of the potential for head injury.

In general, the lower the HIC, the less likely drivers and front-seat passengers would be seriously injured or killed in a frontal crash at 35 mph. A HIC value of 1000, a chest deceleration of 60 G's (G is a unit of acceleration), and a femur (thigh) load of 2250 pounds also indicate approximate thresholds above which more seroius injuries are expected.

Other safety performances also are monitored in the tests, including whether the vehicles retain the windshield during the crash (Standard No. 212) and maintain the integrity of the entire fuel system to prevent leakage of fuel in a crash (Standard No. 301). Of the vehicles required to pass 212, only the Mercury Grand Marquis has failed this year. Multipurpose passenger vehicles (MPV) do not require testing for FMVSS 212 compliance.

The accompanying chart shows the test results for the five most recently tested vehicles. Those released earlier are in the July 1984 DRIVER.

CRASH 1984 New Car Test results

VEHICLE	TEST SPEED/ WEIGHT	DRIVER/PASSENGER HIC	DRIVER/PASSENGER CHEST RESULTANT	DRIVER FEMUR LOADS left/right	PASSENGER FEMUR LOADS left/right
Dodge Caravan Multipurpose Passenger Vehicle (MPV)	35.1/3791	973/1200	44/42	457/864	546/304
Ford F-150 Pickup Truck	35.2/4076	1362/1443	48/51	408/1155	569/458
Mercury Grand Marquis 4-Dr	35.4/4313	1094/1019	58/39	507/385	534/272
AMC Jeep Cherokee 2-Dr MPV (4X4)	35.3/3645	850/1548	44/43	333/292	491/125
Renault Sportwagon 4-Dr Station Wagon	35.1/3102	2053/2721	43/52	247/1476	1138/1319

an Open Letter to DRIVER

from **CW04 J.D.C. Caley, USN**
Bremerton, Wash.

As I take pen to hand at noon on this 24th of May, I am so angry I can hardly see straight. It is a reaction to the events of yesterday — a burning, raging reaction to a situation which I can't let rest, or rather one which won't let me rest. But let me start at the beginning.

In 1968, my parents moved into the first new house in a housing development in Orange County, Calif. Sam, Pat and family moved in across the street. You couldn't ask for better neighbors. Sixteen years have passed by. Sam, now with a heart condition, is retired. Pat has gone on to her reward. Wendy and my sister walked to school together, trading notes on current boyfriends. They graduated from different colleges on the same day and both received Master's Degrees on the same day. Wendy is my friend too. She is still a student working on her PhD at the University of Washington. Wendy should be taking her finals next week. She won't make it now; not for a while. All because of a 2-inch wide piece of nylon called a seat belt which she refused to wear.

I answered the phone last night at 10. It was Sam. Wendy had been involved in a traffic accident and was in Seattle's Harborview Hospital at the Trauma Center and was in critical condition, and he was on his way to the airport, and could I please pick him up at 3:30 a.m. The last sentence as written is a reasonably coherent sentence — that isn't the way it come over the phone. It's hard to write tears on a piece of paper. Sam's other daughter had to finish it for him. Seventy-five year old Sam with his bad heart doesn't need this. That's one reason I'm mad.

I picked Sam up in the wee small hours of this morning and took him to Harborview. We saw Wendy in ICU — if you don't know, the letters stand for Intensive Care Unit — and as a doctor once told me, it is where they put you when you have more than two tubes going in or out of your body. Wendy had just regained consciousness. She could open her left eye and raise her right arm. She recognized us, a significant fact. Her right eye is swollen shut, her face and scalp are severely lacerated, her right arm is broken. They can't yet evaluate whether her skull is fractured or not because they need to take a special X-ray and the respirator tube going down her nose gets in the way. After the plastic surgeon finishes, she will even look a little like Wendy again. She should be studying for finals today. I am mad about this too, but not too mad, because she is the one who chose not to fasten her seat belt — "Real women don't wear seat belts." Wendy is a rebel — I hope she's happy now. I'm not, and neither is Sam.

Lewis Thomas calls the human brain the most magnificent organ in all creation. The average personal computer has more accurate recall, and you can build a very large memory unit which will store as much information, but no computer will ever match the subjective processing capability of the trillion or so synapses in the brain of a 2-year-old. This magnificent machine is enclosed in a membrane called the *dura mater*, a tough fibrous envelope which sort of holds it together. The whole assembly floats free inside the cranium — skull, if you will — which serves to protect it. If you wonder where we are going with this discussion, the word is SUBDURAL HEMATOMA. Wendy has a hematoma around her right eye. Hematoma is a fancy name for bruise. A subdural hematoma occurs when your skull hits the windshield and your brain, in obedience to Newton's First Law of Motion, is smashed up against the inside of the skull on the side of the impact. It is a bruise on the brain. Blood vessels are broken and there is bleeding. The pressure inside the *dura mater* increases. This pressure can kill healthy brain tissue — BRAIN DAMAGE. I said that it was significant Wendy recognized me. The subdural hematoma she suffered didn't destroy the part of her brain where I am stored away. There is a sequel to the subdural hematoma. It is called a CONTRECOUPS Trauma (pronounced "contracoo"). This is what happens when the brain rebounds off the side of the injury and hits the opposite side of the skull in obedience to Newton's Second Law of Motion. Another bruise results — another chance for brain damage. So two injuries with the potential to disconnect the rational part of you from your eyes and ears and mouth — to erase the memories of your mother. And this magnificent creation keeps bouncing back and forth in the skull until all of the energy is dissipated, destroying the engrams, truncating the synaptical connections, purging itself of the Chaucer and Shakespeare and Milton which a candidate for a PhD in English must know.

Now, let's get to the real reason I'm mad. Yesterday afternoon, as I drove to the swimming pool to pick up my son, I followed a Volkswagen van for several miles at 55 mph. In the backseat, there was a beautiful little 2-year old girl STANDING NEXT TO HER SAFETY SEAT. It doesn't take an accident to cause a subdural hematoma and resultant contrecoups trauma in a child — just touch the brakes too hard and your child will continue going at 55 mph into the windshield or into the back of the seat or into the dashboard. Car accidents and sudden stops are leading causes of brain damage in children. Nothing happened to this child — she survived. At 5 this morning, as I stood there holding Wendy's hand, watching the blood ooze out of her ear, I saw that 2-year old lying there, and I cried. What happened to Wendy was her fault! What happens to your baby is *your* fault!

Today was my first visit to a Trauma Center. I hope it will be my last. Spread the word among your families and friends. SEAT BELTS SAVE LIVES AND INJURIES. You shouldn't be caught dead without one.

Time to Think

by Maj. Michael F. Groman

Maj. Michael F. Groman is the Officer In Charge of Quality Assurance, 6594th Test Group (AFSC), Hickam AFB, Hawaii, and an instructor pilot in the HH-53 with over 2400 total flying hours. A 1971 USAF Academy graduate, his past experience includes two years of flying special operations missions in Southeast Asia, and a tour at the USAF helicopter school as an instructor pilot and academic instructor.

Shadows flicker crazily across the curving glass.

The night is stormy. Rain falls in wavering sheets down the outside of the window, distorting the images of objects in the darkness beyond. The sound of the wind rises quickly and falls, marking time. Inside, the room is as dark as the night.

Outside the window, something moves, but I cannot see clearly what it is. It approaches the window. Lightning flashes, taking a snapshot of the scene outside. The thin, pale man stands frozen in its stroboscopic light, a gun glinting coldly in his hand. Thunder explodes overhead. There is darkness, then there is another flash. The thin man is at the window, a glare on his face, the gun pointing straight at me.

There is darkness. Then there is one last flash as the muzzle of the gun blossoms petals of fire and smoke . . .

Yawning, I turn off the television. The face of the picture tube becomes a dark mirror. The room is silent. I put on my hat and jacket. Grave shift starts in 30 minutes, and I have to make roll call.

Outside, it is still dark and stormy. The storm which hit this morning dumps its loads of rain on house, lawn, and street. The glare of the street lights sparkles off every raindrop. I am glad I have a covered carport.

I am running late. If I don't hurry, my supervisor will hand me my head on a platter. As I start my car and pull out into the roadway, I wonder if I've forgotten anything. Something nags at my mind, but I don't have time to stop and think. I drive on.

The sheen of wetness on parked cars reminds me of an aircraft's fuselage in the rain. Smooth, slippery. I have to be careful tonight as I climb on top of my aircraft. The boots I'm wearing are dangerous when it's wet. The tread does not grip well on wet surfaces. Something is wrong with the design. Until supply gets a good replacement, I have to wear non-skid overshoes. It's a ridiculous situation, but I am careful. I have the overshoes on now. How someone could buy the wrong equipment for us to use I don't understand. I can't believe that anyone can be so dumb.

The gutters are full. In some places, rain water covers the whole roadway with a dark, rippling blanket. It slows me down. The tread on my tires is worn near-smooth. I've been trying to save some money to get new tires. I wish I had them now. The water sprays back from my wheels in flaring wings as I drive as fast as I safely can. When I reach the freeway, I will have to hurry to make up the time I lose now.

The traffic lights cast multicolored reflections on the wet streets. Every light along the way adds its wash of color to the glistening ground. Despite the fact that I am concentrating hard on driving, my car occasionally skids as I cut through deeper puddles in the road. Still, I enjoy seeing the streaks of red, yellow, and green from the lights. I am being careful not to go too fast.

The feeling of having forgotten something comes back to me. For a moment I try to think of what I could have missed. Ahead, I see the last traffic light before the freeway on-ramp. As I watch, it turns green. There is no more time to think. I accelerate through the intersec-

tion and up the ramp. Now I will get back some of the time I lost on the side streets. I can still make roll call.

I glide into the main part of the freeway. This late at night there is not much traffic, and here the road is free of puddles. I press the gas pedal farther to the floor. The needle on my speedometer swings past the top of its arc. Fifty-five, 60, 65 miles per hour. The needle moves on to the right. It will be close, but I will get to work on time. No platters for me tonight.

The rain beats against the windshield as I cruise into the last stretch of highway before the base exit. The windshield wipers sweep away the water at fast speed, but the raindrops strike the glass too fast for the wipers to keep the view completely clear. Though I'm being careful, I don't like having to drive like this. I just don't want to be late either. I've got a good record, and I don't want it spoiled. If the weather's this bad again tomorrow, I'll be more careful and leave home earlier. I don't like having to drive like this.

The base off-ramp appears ahead. A long slope down to the first curve and underpass, a rising stretch to the next curve, and a straight way through the gate — that's all I have left to go. I've got it made. I pass beneath the exit sign and head down the ramp to the first curve.

Shadows flicker crazily across the curving dashboard. I see the dark mirror of water on the road ahead.

I don't feel the tires hit the water, but the steering wheel becomes light in my hands. I look at my speedometer. It reads 52 miles per hour. The car is strangely silent. All I hear is the rising and falling beat of the windshield wipers, marking time. I am beneath the underpass.

The nose of my car starts to drift left. I take my foot off the gas pedal and turn the wheel to the right. I look straight through the windshield. There is a roadside light directly ahead. Each raindrop glints sharp and clear in the cold light before it splatters against the glass. I hear the drops drumming on the roof of the car. Now I know why the car was so quiet. I am not beneath the underpass now.

I have turned the wheel too far. The front of the car swings back to the right, faster and farther. I twist the wheel back to the left, but I am too late. The car is spinning now. It has an odd feel to it, like a disk on an air hockey table. In blurred, stop-action glimpses I see the roadside light get closer.

My car reaches the shoulder of the road. It stops spinning. It is pointed at a slight angle away from the road, going forward. The light post is coming straight at me. Through the distortion of the wet windshield, it looks like a pale thin man. I press the brake pedal as hard as I can and start to turn the wheel away from the post, but on the rainsoaked ground my tires don't grip. I know I am too late again. Though there is no more time to think, I suddenly remember what I forgot as I left home.

The front of my car strikes the concrete base of the light pole. The speedometer reads 38 miles per hour. The windshield rushes to meet my eyes, exploding like thunder, blossoming with a million jagged petals. The seat belt lies useless next to the seat.

I can't believe that anyone can be so dumb.

DRIVING AT LACKLAND

by Sgt. Richard L. Manugian
Air Force Military Training Center
Lackland Air Force Base, Texas

U.S.A.F. Photos by Robbin Cresswell

With roughly 8,000 enlistees in basic training at any given time and an overall population of 28,000, Lackland Air Force Base, Texas, presents drivers with many traffic conditions seen on no other military installation.

Drivers are likely to encounter anything from a 50-member flight of trainees marching in formation to a mass exodus of allied and foreign language students attending the Defense Language Institute. In all situations, the pedestrian has the right of way and drivers are required to stop at any posted crosswalk where someone is waiting to cross the street.

There are actually two sides to Lackland because Southwest Military Drive, a 45-mph public highway, cuts through the base and divides Lackland into a training side and a permanent party side. All told, Lackland boasts 14 gates, four of which are open 24 hours a day.

Speed limits on the training side of Lackland are 20 mph, 10 mph if passing troop formations. Formations of basic trainees abound; they march in troopwalks designated by raised dots. Though the troopwalks are a part of the paved streets, vehicles may not drive on them.

Road guards are posted to alert drivers whenever formations of troops cross a street. Drivers must stop at least 15 feet from road guards.

On the permanent party side of the base, the general speed limit is 30 mph. But on both sides of the base, drivers must observe speed limits of 15 mph in housing areas and 10 mph in parking lots.

Seat belts are required at all times, with periodic spot checks performed at varying locations. Occupants found not wearing belts receive written warnings and are subject to further action at the discretion of their commanders.

The Lackland Training Annex, whose missions range from the Officer Training School to munitions to marksmanship training, is located one mile from Lackland and imposes similar speed limits. Drivers may travel up to 30 mph on open roads but must drive 15 mph in housing areas and 10 mph around troop formations, in parking lots and in marksmanship training areas.

The Wilford Hall USAF Medical Center, the largest hospital in the Air Force, is located on the permanent party side of Lackland and attracts a substantial flow of traffic. The hospital services a mix of active duty members, dependents and the large local retired Air Force population. Its parking lots are large and busy, and security police regularly scan the lots for parking violations. If the wheels of a parked vehicle even touch the painted stripes that mark parking slots, the car will be ticketed.

One Lackland gate demands special attention because of its high potential for hazard — the main gate leading from

continued

Editor's Note: This is the first of a series of articles about driving conditions at ATC technical training centers.

The middle overhead light on Southwest Military Drive turns red while the right lane light remains green in order to let traffic from Berquist Drive (left) enter the highway without completely stopping the flow of traffic on Southwest Military.

Although drivers exiting Lackland's Berquist Drive gate onto Southwest Military Drive receive a green signal from a pair of overhead lights, they may enter the highway only in the left lane. The right lane is reserved for drivers on Southwest Military continuing ahead.

Wilford Hall, where Berquist Drive feeds out onto Southwest Military Drive. Southwest Military is a two-lane highway with a traffic light for each lane, and the light for the right lane will often show green while the light for the left lane shows red. This allows traffic on Southwest Military to continue through the right lane while also allowing traffic from Berquist to enter Southwest Military in the left lane. But although Berquist is a one-lane road and its drivers may enter Southwest Military in only the left lane, its drivers are guided by a pair of green lights which could lead them to believe they can enter Southwest Military in both the left and right lanes. If a driver did that, he or she could easily collide with a vehicle traveling straight in Southwest Military's right lane.

Lackland is located seven miles from downtown San Antonio, Texas, and one mile from Loop 410, which provides convenient access to major routes. San Antonio is second only to Los Angeles in total freeway miles.

Road guards are always posted to alert drivers whenever flight formations march across a street. Drivers must stop at least 15 feet from the road guards.

When passing flights of troops in formation, vehicles must slow to a maximum speed of 10 mph. The formations normally march in troopwalks designated by concrete ridges (above) or lines of raised white porcelain dots (not pictured).

TRUE ACCIDENTS

Following are a few reports of accidents involving Air Force members. We have removed names and references to dates and places.

PUDDLE

A member was traveling east on a four-lane highway in the left lane. Two vehicles, one car and one truck, were traveling west on the highway at a high speed. It was raining heavily and the truck hit a puddle of water on the road. The driver lost control of his vehicle and sideswiped the car next to him. The truck bounced off the car, jumped an eight-foot median separating the four-lane highway, and hit the member's van head-on. The member was pronounced dead on arrival at the medical center.

HEAD-ON

Operator one departed work at 1630 hours and went to his off base quarters. He changed clothes, packed his car, picked up his wife and departed to pick up their daughter, who was staying with her grandparents. After traveling approximately 64 miles, they passed a small convenience store. An unidentified vehicle (vehicle three) pulled directly into their path from the parking lot of the store. In order to avoid hitting this car, operator one swerved sharply to the left. Vehicle one crossed over the middle of the road and collided head-on with vehicle two, a van. Operator one and his wife were pronounced dead on arrival at the hospital. Seat belts were not being worn in either of the two vehicles.

SPEEDING

The motorcycle operator was returning to his residence on his motorcycle. He was westbound on an avenue in a 30 mph speed zone. According to co-workers, the operator was familiar with the intersection of the avenue and the street where the mishap occurred. At the accident location, the avenue changes from a two-way street to a one-way street eastbound. Therefore, motorists westbound on the avenue (as was operator one) cannot continue straight ahead, and must turn right onto another street. To prevent the westbound avenue traffic from entering the oncoming one-way traffic, the avenue has a median with a center guardrail that curves to the right onto the other street to direct the traffic onto that street. As the operator approached the intersection he was in the left lane. According to the only eyewitness, a city bus driver, the operator passed the bus going between 75 and 80 mph just prior to the intersection where he would have to turn right. Prior to reaching the guardrail that curved to the right, the motorcycle hit the curb, then went up on to the median. At the point the guardrail begins to curve it appears that the operator's leg hit the guardrail and he was thrown off the motorcycle, coming to rest against the corner of the curb 19 feet away. It appears that operator one's head and shoulder took the full force of the impact with the curb and that only his left leg and the motorcycle hit the guardrail. Operator one was wearing a full face motorcycle helmet with a clear face shield. The helmet was abraded, but did not shatter. The operator was taken by ambulance to the hospital where he remained until he died a week later from a massive coronary. The Blood Alcohol Test indicated that alcohol was not a factor.

ALCOHOL

At approximately 1400 a sergeant and a female companion went to a park for the afternoon. While there, he allegedly consumed four beers. Leaving the park because of rain at approximately 1700, they returned to the base, arriving at the NCO open mess about 1745. The sergeant drank three more beers but did not consume a meal and returned his companion to her dormitory room at approximately 2030. He said he wanted to attend a jazz concert at a hotel in town upon parting company with his friend. He frequently attended these regular jazz concerts on the weekend and usually left the hotel in time to return to his quarters around midnight. The mishap location is within a direct route of travel from the hotel to the base. Whether he ate or consumed more alcoholic beverages after about 2000 cannot be positively established; however, the Blood Alcohol Content (BAC) of .10 as reported by the medical examiner indicates that he probably did continue drinking during the later evening. Based on evidence available, he was driving east at or below the posted speed limit of 45 mph. Another driver, traveling west on the street in the left turn lane at an undetermined speed, either lost control of her car or misjudged the location of her intended path of turn. She turned across the raised median into the eastbound traffic lane, launching her car for a distance of five to eight feet and striking the sergeant's car just forward of the driver door at approximately a 45 degree angle of impact. The sergeant suffered severe head and internal injuries and was pronounced dead at the scene by the medical examiner. The woman was taken to the hospital, treated for minor injuries and released. She had a BAC of .14. The sergeant had not used his seatbelts and investigators believe he would have survived if he had done so.

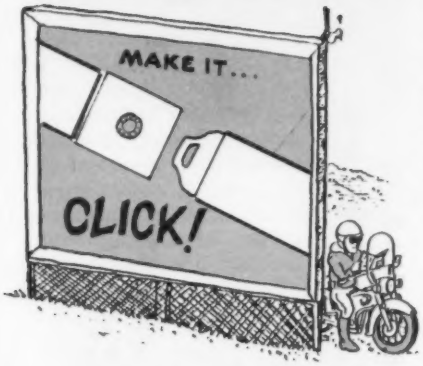
PASSING

An Air Force officer and a passenger were riding a motorcycle on a two-lane highway, overtaking two slower moving vehicles. The lead car, a station wagon, was slowing and signaling for a left turn. The second car blocked the view of the officer from seeing the station wagon. The officer tried to pass both cars at an intersection where the station wagon was turning left onto an intersecting street. The motorcycle hit the left rear of the station wagon. The officer, thrown from the motorcycle, also hit the station wagon, causing massive head injuries. He was not wearing a helmet. He died an hour later. The passenger, who was wearing a helmet, received critical injuries.

ALCOHOL

Two Air Force members went to the base NCO club at 2130 after a 13½-hour shift. Each had four beers before they drove a friend back to his quarters at 2230. At 2250, they arrived at the housing area club. They each had another beer. The club closed at 2300, so they each bought two more beers to take with them. These were consumed between 2300 and 0100. At 0100 they left the housing area to drive back to the base, using a two-lane back road instead of the main highway. Halfway between the housing area and the base, there is a series of sharp turns and narrow bridges, with a posted speed limit of 40 kph. Just after a 90-degree left curve they came to a bridge. Because of the alcohol, excessive speed and unfamiliarity with the road, the driver ran off the right side of the road. The bottom of his vehicle hit and traveled along a retaining wall of the bridge for about 18 feet before the vehicle flipped off the wall and into a gully. The vehicle was on its top and the two members were lying several feet away. Neither had worn a seatbelt. The driver died of massive head injuries and the passenger was hospitalized with head injuries. The passenger's Blood Alcohol Content was .146 an hour and a half after the wreck, and although no test was taken on the driver, it was assumed his BAC would be comparable.

Timely Topics



NHTSA ISSUES NEW CONSUMER INFORMATION RULE ON UTILITY VEHICLES

Motor vehicle manufacturers will be required to provide consumers with information about the handling characteristics of utility vehicles, under a final rule issued by the National Highway Traffic Safety Administration (NHTSA).

Beginning Sept. 1, 1984, manufacturers will have to place a permanent sticker or label on the windshield, frame, dashboard or some other prominent location of the vehicle to alert operators to the handling differences between utility vehicles and passenger cars.

The sticker will inform owners that the design characteristics of utility vehicles can cause them to operate differently than passenger cars under certain driving conditions. Sharp turns or abrupt maneuvers in such vehicles could result in loss of vehicle control or rollover, both on paved roads and in off-road use.

The new consumer rule also requires manufacturers to place information in the vehicle owner's manual concerning the proper method of driving utility vehicles under both on-road and off-road conditions.

Utility vehicles are multipurpose passenger vehicles with a wheelbase of 110" or less, which are designed with special features for occasional off-road use. They commonly have high centers of gravity and relatively short wheelbases and/or narrow tracks. Examples of utility vehicles in current production include the AMC Jeep, Chevrolet Blazer, Ford Bronco, Dodge Ram Charger, Toyota Land Cruiser and the GMC Jimmy.

The federal safety agency said the combination of unique handling characteristics of utility vehicles and a lack of driver awareness and understanding of the need to adjust their driving practices is apparently a large part of the accident problem in these utility vehicles.

ARMY ATTACKS DRUNK DRIVING

Nobody's in favor of drunk driving, but until recently nobody seemed to be doing much about it. But that's all changing. The United States is experiencing a nationwide change of attitude toward the drunk driver — people are no longer turning their backs and ignoring the problem.

Neither is the Army.

DA is strengthening its already hard stand against drunk driving and other forms of alcohol abuse in the Army by launching an intensive 5-year alcohol abuse prevention program. This is to be a coordinated effort, drawing upon the resources of many DA agencies. For instance . . .

DA has tasked the U.S. Army Safety Center at Ft. Rucker, Ala., to support the program. The Safety Center is developing an awareness campaign that will focus on three key areas:

- Drinking and driving.
- Adverse legal and career consequences of alcohol abuse and drunk driving.
- Destroying the macho myth of the hard-drinking soldier.

Campaign media will be programmed to hit hardest at holidays that are traditionally associated with increased alcohol consumption. Army people will see posters, bumper stickers, magazine and newspaper articles, and radio and TV spots hitting the field this summer.

The Army is doing its part to get the drunk driver off the road. But the Army (Air Force, Navy or Marines) can't do it without the help of every member. Probably the most effective single thing each of us can do is examine our own attitudes about drinking and driving. Drunk driving will stop only when every individual decides that it is no longer socially acceptable and stops ignoring the problem.

HANDLING ENGINE OVERHEATING

You are stuck in a traffic jam on the hottest day of the year and the red temperature warning light on your car's dashboard comes on. Other car radiators are boiling over left and right. Do you know how to avoid becoming the next auto breakdown? The Automotive Information Council (AIC) offers suggestions on how to handle engine overheating.

When the temperature warning light goes on or the temperature gauge starts crawling up to the danger zone, turn off the air conditioner. It pumps heat into the engine compartment when it is running and can contribute to overheating.

If you are stuck in traffic, try to position your car about 10 feet behind the car in front of you so that its hot exhaust isn't pulled into your radiator making the overheating problem worse.

If the warning light doesn't go off or the temperature gauge needle doesn't start to fall, shift the car into neutral if you are still sitting in traffic. If the engine still isn't cooling down, pull off the road and park. Let the engine run at normal idle speed for two or three minutes to see if that doesn't cool down the engine.

If that doesn't work and you see steam or coolant escaping from the engine compartment, shut off the engine immediately. Do not open the hood for at least 15 or 20 minutes because you could be burned by escaping steam and coolant. Don't remove the radiator cap while the engine is still hot. Hot fluid and steam can be blown out under pressure and can burn you.

Under the hood, look for radiator or hose leaks, broken hoses or belts. If you have some heavy duty tape you can wrap it tightly around a leak in a hose and add water to the radiator when it has cooled. Drive slowly to a nearby service facility for a new hose and more antifreeze. If a belt has broken you will need to call for a tow truck.

If the belts on your car are four years old, they should be replaced. The chances of belt failure increase dramatically at four years, according to a Gates Rubber Company national survey. Avoid engine overheating caused by broken hoses and belts by checking them regularly for signs of wear, says AIC.

THE HUMAN FACTOR IN AUTO ACCIDENTS

The largest cause of auto accidents is driver error, says Virginia Polytechnic and State University researcher Dr. Scott Geller. Geller advocates a behavioral approach to improving highway safety. While mechanical problems, neglected maintenance and environmental factors can be contributing factors in auto accidents, Geller recommends changing people's habits to save motorist's lives. An example of a behavioral approach to auto safety would be encouraging drivers and passengers to use safety belts. (AIC Newsletter)

HEAP BIG POW-WOW

Chiefs and INDIANS

An annual program was inaugurated this spring at Holloman AFB, N.M., that will provide more qualified motorcycle safety instructors around the world. Motorcycle Safety Foundation staff members used the New Mexico site to teach a very intensive Chief Instructor Workshop that certified selected individuals to teach motorcycle safety instructors in behalf of MSF.

The staff "Super Chiefs" for this course included: Meridith G. "Hoot" Gibson, MSF Central Regional Office director from Knoxville, Tenn.; Lynne Nathan of the MSF Headquarters in Chadds Ford, Pa.; Don Mapp, coordinator of the Washington Motorcycle Safety Program in Olympia; retired Air Force Lt. Col. J.T. Smith, an MSF chief instructor from Clarksville, Tenn., and the Holloman AFB Chief Instructor Richard A. Garrett.

On the first day of the course, the 18 chief instructor candidates (CICs) arrived and went through introductions. Then they faced the first phase of chief instruc-

tor training: MOST II. MOST II (Motorcycle Operator Skill Test) is a hands-on examination of the basic skills needed to operate a motorcycle safely on the streets and highways.

All but three of the CICs passed the MOST II on the first attempt. Those three were retested and passed. Had they failed a second time they would have gone home. One must have the basic riding skills tested in the MOST II in order to teach others.

Following the MOST II the CICs, who had to be certified instructors with experience in order to be considered for this course, began an update phase of the workshop. This included the Motorcycle Rider Course (MRC) building blocks, simplified range control and approved revisions such as combining MRC exercises to allow the novice student more time actually riding the motorcycle.

The next six *very* long days involved the CICs in the absorption of the nine

modules of the Chief Instructor's Guide. The modules are:

■ **One:** Welcome, general course administration, introductions and an overview of the instructor course.

■ **Two:** Qualifying rider test for instructor candidates (ICs).

■ **Three:** The history and development of the MRC, and the most current research available to support rider education.

■ **Four:** The organization and administration of a rider education program.

■ **Five:** Teaching ICs to teach, demonstrate and evaluate the MRC.

■ **Six:** Teaching ICs to teach, demonstrate and evaluate the Better Biking Program (BBP), an experienced rider course.

■ **Seven:** The administration of the written exam to ICs.

■ **Eight:** CICs teach ICs to demonstrate basic classroom and range teaching techniques, operate audio-visual equipment and prepare teaching assignment.

■ **Nine:** Course wrap-up and graduation.

Most of these days started at sunrise, went through sunset, and ended up back in the motel rooms for individual and group study.

One day during the course, Gary St. Arnold, director of Licensing for MSF, taught the techniques used in teaching, administrating and grading the MOST II. MOST is now being used by many states for motorcycle operator licensing. As a result some chief instructors may be called on to teach MOST II to state licensing personnel.

Interested observers during the first week of the workshop included Lyle C. Anderson, director of the MSF Western Regional Office, and Peter Fassnacht, supervisor of Traffic Safety-Motorcycle Training Program of the Canadian Safety Council in Ontario.

Near the end of the first week the CICs were given a written test. This combination of essay and multiple choice questions was designed to see if the CICs had absorbed enough information to teach

ICs. The minimum passing score was 80 percent. Three CICs didn't attain that level and they returned home.

While the CICs were preparing to teach the ICs, the ICs had arrived at Holloman and were being put through a two-day, 20-hour MRC by base instructors Gerry Williams, Gevan McCaughey, Ron Brady, Pete Gastol and Greg Selman.

When the chiefs (CICs) finally met the Indians (ICs) the first order of business after introductions was the MOST II, again.

The question is always the same: "Do they have the basic rider skills needed to teach and demonstrate the MRC?" Three failed the first attempt; one failed the second. He went home.

Two days later another candidate returned his books and said he'd had enough. This was no piece of cake.

After the MOST II the chiefs and Indians broke into two groups and went through some very long hours of becoming very intimate with the techniques and skills involved in rider education. They came to know the Hurt Report and Photographic Analysis by their first names. Range control, instructor positions, movement from one exercise to another, WHIM (Wheels in Motion), peer teaching, evaluation techniques, public relations, range layouts, facilities needed for MRC/BBP, sponsors, etc. The list goes on.

A lot of material was covered in a short time. That is, if you consider seven days a week, nine to 12 hours a day and homework assignments on top of that a "short time."

By the fourth evening the ICs were preparing for a test the next morning and the arrival of the novices in the afternoon. The ICs had to be prepared to teach sessions One, Two, Three and Four because the actual teaching assignments wouldn't be made until after the test. All the ICs would be evaluated while teaching a minimum of one classroom and one range session. Depending on the number of ICs that were left after the morning test, most of them would end up teaching more sessions than the minimum.

After the morning knowledge test there were six less ICs.

But the pressure wasn't over yet. In the two to four hours each IC was to teach, they would be allowed only one overall unsatisfactory. On the second "unsat," they would be eliminated from the

continued

course. There were a few "unsats" given the first afternoon. As a result, with two and a half days left to teach, a lot of the Indians got together with their chiefs at night to prepare for the next lessons.

During the remainder of the course, the Indians were teaching the MRC to two groups of novices. After each hour of class the Indian who taught that hour was "de-briefed" by his primary chief under the watchful eye of a super chief. The chiefs were still being evaluated.

The result was four super chiefs evaluating 14 chiefs evaluating 14 instructors teaching the MRC to 22 students. That's what the workshop was really about: super chiefs teach chiefs how to teach Indians to teach motorcycle riding — safely.

All things considered, everything went well. Another IC was not fully prepared to conduct his last hour of the MRC. It was his second "unsat" and he didn't graduate. Two of the novice students weren't fully prepared for the street and were asked to sign up for Holloman's next MRC. It is every instructor's responsibility not to graduate a student who has failed to grasp the basics in survival skills necessary to operate a motorcycle on the street. Of the 22 novices who started out, the workshop MRC graduated 18.

The new chief instructors graduated were: Capt. Dale Van De Ven, CPO Joe J. Parker, MSgt. Martin Barel, SSgt. Peter C. Moore, SSgt. Peter Ross, Sgt. William H. Braun, Ed Culberson, Craig Etzel, Jerry Heil, Nancy Huddleston, Jeremiah Lehman, Charles Nephew, Donald O. Nuttall and Tom Yager.

The new instructors were: Capt. James Miller, Capt. James Miller, Capt. David F. Smith, TSgt. Michael S. Ball, TSgt. Alan R. Parlato, SSgt. Jeffrey K. Halstead, Sgt. Eugene J. Kennedy, Sgt. James E. Louthan, A1C Chris C. McManus, A1C Brian K. Schum and A1C Ralph T. Smoot.

What an EXPERIENCE!

Editor's Note: The writer of this article, Mrs. Helen Taubers, is a civilian member of the Joint Defense Space Communications Station (JDSCS), Woomera, Australia.

As an average over-30 housewife, there have been a few things in my life that I had never had the opportunity to do. One of them was motorcycle riding.

A few weeks ago, one of the NCOs who works in the 1970th Communications Squadron Maintenance Support Section, TSgt. Charles B. Coyner, Jr., approached me and asked if I would like to enroll in the Motorcycle Rider Course for Beginners which he would be conducting the next weekend.

Charlie knew of my background — never been on a motorcycle before, terrified when my feet get off the ground, and a myriad of other "snags" that I could think up. All excuses fell on deaf ears. Even my husband, Peter, and my Commander, Lt. Col. Robert M. Chaplin, encouraged my participation in the course. Well, they all succeeded, and on the following Friday it took all my courage to go out to the first class.

Fortunately, once I entered the classroom I found that I wasn't the only one attending the course who had never been on a motorcycle before. I began to breathe a little easier.

Charlie introduced the other instructor for the course, MSgt. Edward J. Hildreth, 5th Defense Communications Squadron/1970th Communications Squadron first sergeant, and explained briefly what we would learn in order to become safe motorcycle riders. The course is based on an approved Motorcycle Safety Foundation curriculum and supported by the South Australian Road Safety Council.

For this class, we were very fortunate to have the loan of a few privately owned machines, and with the help of very generous donations from our local Shell/Yamaha dealer, and Honda Australia, each of us had a motorcycle to learn to ride.

I felt really comfortable and settled back in my chair, and watched some films and slide presentations which showed how to begin the process of riding a motorcycle.

The way I seem to remember it, a lot of people I have seen with motorcycles just seemed to jump on and drive off into the distance. No so! It really is more complicated than it looks!

After we had seen the movies and slide presentation everyone in the class, even me, was eager to go out and have a go at riding a motorcycle.

We moved out to the range area, which Ed had set up, and once we had selected our motorcycle and put on our protective clothing, we were shown how to walk the motorcycles to the range area. A couple of awkward moments! I thought the motorcycle was going to tip over, and I would follow. No worries; after the first 10 yards, I felt like I had been doing it for ages.

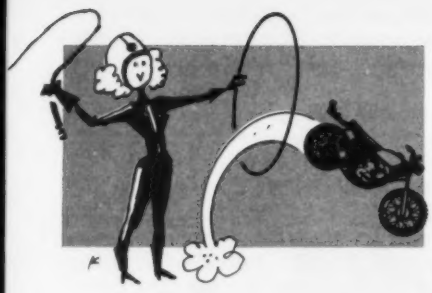
The big moment. Charlie's voice booming out, "Mount your motorcycles." No chance to turn back!

We were, once again, instructed on the procedure for starting the machines. How on earth would I manage a kick-start? The first 10 tries were the worst! At last I managed it, with more determination than skill. The bike thundered into life, and my first ride was about to begin.

It took me quite a few tries to be able to actually start moving slowly. How was I ever going to get my feet off the ground? Everyone else seemed to be doing okay with their feet off the ground. If they can, I can — here goes! Wow! I did it!

I went from one side of the range to the other in a very jerky fashion, but I didn't put my feet down. We wheeled the bikes around, remounted, and drove back to the other side. After we had repeated this exercise a few times, it was time for "Engines off;" "Dismount," and we wheeled the bikes back to the shelter where they would be locked overnight. A short class session and my first day was over. Relax!

I never thought I would get up, be organized, and arrive at class on time Saturday morning. Fortunately, the alarm did go off and I was on time; so was everyone else!



Once again, we were instructed on the skills of riding safely. We went out on the range early. The forecast was for a 34 degree Centigrade temperature, and we were all hoping the range session would be finished by early afternoon before it got too hot.

Protective gear on. "Mount your motorcycles" and here I was, back for day two! Oh, no! We have to ride all the way around the perimeter of the course. If everyone else can do it, so can I! Here goes . . . don't put your foot down . . . look up . . . watch where you're going . . . that turn was a bit wide! I'm going to do a whole circuit before I slow down too much and put my foot on the ground; it's ruining my boots. Made it! I feel fantastic! Here we go again — another of the very simple but effective instructions on the simple weaving and turning exercise between the safety cones Ed had laid out.

I really don't think I am cut out for this. Whoops! Knocked over another cone! Wonder if there are any prizes for the rider who knocks over the most cones? Well, after a few tries, I managed to get through without knocking down a cone, but my left foot, for some reason, really does not want to stay on the foot peg. Now we are going to learn how to turn in circles; think I can manage the big one. Panic! Stalled the engine! Start again . . . take your time . . . here goes. Well, once I got around one lap it wasn't too bad. After a few, I was directed to the other circle. Whoops! Lean the other way; around I go again.

Wow! It was getting hot, the perspiration was running down my back, and the flies running under my visor were definitely making me uncomfortable.

We did many more exercises during the morning and, miracle of miracles, I was still walking and hadn't fallen over or done anything too silly. We wheeled the bikes back to the shelter and retired to the classroom.

At last, a chance to cool off — that Coke was just what I needed. During the afternoon, it was too hot to go out on the range, and we stayed in the classroom. After lunch Charlie and Ed showed us more films on motorcycle safety. It seemed so easy when you watch other people up there riding around. I'm sure I can make it through the range skill test. An earlier start in the morning. What? 0730? Hope that alarm goes off!

What a beautiful morning — plenty of clouds and a slight breeze — just nice for riding a motorcycle. There was just time for a quick briefing, and then out to the range once more. The range was set up in a street-type situation — Priority Roads — left and right lanes — one way streets. I think I am having a bad dream!

No, here we go again. Protective gear on, mount the motorcycle, engine started, keep your feet up, use the indicator — I think I'm getting the hang of it. This exercise was quite tricky. Oh, no! I've pushed the indicator too far. Don't look down . . . turn it back without looking . . . I did it! Another pat on the back. We were then directed through a rider skill test. Wow! Look how close those cones are together — I'll never make it! Slow down; watch; turn; lean. Come on, girl, you can do it. Whoops! There goes that foot again! Now for the figure eight — between the cones, around the first U-turn, now for the second — blast! I went outside the cone-marked area. I sure am going to get this bike around there next time. Well, this is interesting; two lines of cones one foot between them, 50 feet long. How on earth am I going to stay up all the way through them — and be slow enough to take more than fifteen seconds? I think I am going to get there. Look up . . . think . . . here goes. Nearly made it, but that left foot just had to hit the ground just once.

I learned many other skills on Sunday: how to ride the bike one-handed, standing on the pegs, rear braking, combined braking and engine controlled braking.

We all did well once we mastered a few of the finer details.

Here we are, back on the range. Wonder how I'll do this afternoon? My wrists, thumbs and shoulder muscles are beginning to get sore. Even my nose feels a little tender — forgot the sunburn cream!

Once back in the classroom, Charlie explained what we were going to do during the afternoon. Don't think I'll come back . . . only one more session . . . I can do it! Lunch time.

Here we go again. I am improving at turning and leaning and feel much more comfortable. Now for the big test. I have to have a passenger on the bike. Wonder how it will feel? Well, now's the time to find out. Here he comes. How are we going to fit on the bike? Hope I can do okay. The laps around the range were fantastic, and even when Charlie directed me to do some circle laps, it felt good.

It was my turn to be a passenger! Lean with the rider; don't put your feet down; do what he says. Here we go. What a combination! We rode around the circuits like professionals, although I'm sure my partner must have fingerprint bruises on his hips!

Now for the final testing. We did various exercises applying the skill combinations we had learned during the course. Here I go again . . . think . . . head up . . . clutch in . . . both brakes . . . come on, girl, you can make it! With the final section completed, and all of us feeling very much more at ease, we took the bikes to the shelter and parked them.

Into the classroom once again, and we watched a film on insurance for yourself and your motorcycle. Charlie and Ed then separated us into two groups and took us out where the bikes were parked, I was in Charlie's group (Charlie's Angels?). We were shown how to completely maintain a motorcycle. It was really fantastic. I didn't realize how simple some of the problems with a motorcycle could be overcome. When we had completed the maintenance session, we adjourned to the class and sat for a written test.

Panic!? I wonder if I'll know the answers? Fifty questions! Help! No worries with the first few. Think, girl, think! Last one — finished. Now to swap our tests around. Marking time! Wonder if I did very well? Ten or more incorrect answers and I'll have failed. Phew! Only seven incorrect. I wonder why I marked that one b., I knew it was really meant to be c.

After a few quiet moments, the 10 students who participated in the course had passed. I was very pleased with myself, and now feel much more confident about riding a motorcycle safely.

Without dedicated men like Charlie and Ed around, many more people would just end their lives being a tragic motorcycle accident statistic. With their patience, understanding and excellent guidance, I am now confident that I could go out and ride and maintain a motorcycle safely.

Anyone, be they housewives, experienced riders, or beginners, if you have an opportunity to attend a Motorcycle Safety Course, don't hesitate. It could save your life, and will be an experience you will never forget.

Dirt's the Enemy

What's washing a car got to do with safety? Probably more than you think.

First, when you wash the outside of the car you're going to clean the windows which should make it easier for the driver to see. Because many drivers say after an accident that they didn't see the other vehicle, clean windows have got to help.

Secondly, a clean car may not run any better, but you'll feel better about it. This pride in the vehicle may be reflected in your driving and contribute to your safety consciousness.

Of course this pride in the appearance of your vehicle can be a two-sided coin. On the flip side there is the chance that you might be so concerned with the appearance that in your attempt to miss a mudhole or other hazard to the finish, you swerve into a lane of oncoming traffic.

Now, before you remark that *everybody* knows how to wash a car, take a good look around the parking lot. Then consider we're talking about cleaning a car, not just washing one.

Of course you're going to have to begin someplace and when cleaning a car you start by washing it. Since it's going to be easier to wash off a week's worth of dirt than to battle the build-up from an entire season, wash your vehicle regularly. Once a week is ideal, but don't let your car go for more than a month without a good bath.

Since direct sunlight causes water spots, do the washing in the shade or on an overcast day.

Because coin-operated car washes are usually covered they're good for doing basic washing. Besides, with the spray guns it's possible to get at those underside, rocker panel, wheel well and other hard-to-reach areas. However, problems can arise with the high pressures from the guns which can actually grind dirt into the finish.

The idea is to remove the dirt without damaging the car's finish. Therefore you first want to flood the car's surface with water, starting at the top and working down.

Once the car is completely hosed down, it's time to apply sudsy water. Detergents designed specifically for car washing are good, but very mild dish-washing soaps work just as well. While car washing mitts are great for applying the suds, clean, soft towels with a deep nap are just as good. The deep nap lifts particles away from the paint, preventing scratches. Use only one side and get a clean towel when the one you're using is dirty.

Always work in small areas, using steady, medium pressure with long arm-length strokes in line with the vehicle. Never use a swirling motion.

Use additional towels to wipe off the majority of the water after rinsing and to do the final drying. Again, turkish towels (or last year's beach towels) are best so long as they are clean, soft and have a deep nap.

Chamois should be used on well-waxed cars only since they can scratch when not used properly. The proper way to employ them is after the car has already been washed, rinsed and dried. Then wet the car down again with cold water and pull the chamois across the car, dragging the water with it.

The tricks for getting hard-to-remove stains, bugs and road tar off the surface are not difficult to remember. A warm-water soak will usually remove dead in-

sects. Road tar and other stains come off with the solvent that rustproofers use for cleaning overspray. Charcoal lighter fluid also works well.

Since a waxed car is easier to wash, that's the next step in cleaning. A car that has been waxed frequently will not require rubbing out of badly oxidized paint. Otherwise you'll want to remove the dead paint with a polish, not a rubbing compound, before waxing. Abrasive rubbing compounds can remove all the paint, leaving nothing but bare metal targeted for rust. Be especially careful around striping since even polish can remove these from the surface.

Before waxing you'll want to take care of any nicks, chips and scratches in the paint. If the body is showing signs of rust, you're going to have to strip the rusted areas, remove all traces of the rust, prime and repaint.

To prepare a nick, chip or scratch for touch-up, it must first be deep-cleaned by washing with soapy water. Be sure to rinse and dry the area thoroughly. Then go over the spot with a wax or grease remover to get rid of any gunk that's in the damaged area or the touch-up paint won't take hold. You may even need a toothbrush to get down to the bare metal.

You'll want to do your paint touch-up on a day when the temperature is 70 degrees Fahrenheit or warmer since many paints are hard to handle below that temperature and may not set properly when it's too cold.

Don't try to use spray-on touch-up paint unless you want to sand and prepare the entire area only to have the finish look worse when you're done than when you started.

All you really need is a small touch-up applicator kit (kit, tube, can, bottle or what-have-you) from a dealer or parts store in the appropriate factory color. Any time you have a car repainted, try to get a small can of that paint for future touch-ups.

Use a small camel's hair brush (No. 1 or No. 2 artist brush) to dot in the dam-

continued

Any car wash starts with flooding the car to remove as much dirt as possible without scratching the surface. What follows photographically is a quick wash for a vehicle that is well-waxed.

Rinse the "wash" towel after each pass across the car. The rinsing can also be done in a bucket of water. The idea is to float free all the dirt the deep nap lifted from the finish.

Use a clean, soft towel with a deep nap and soaked full of water to "wash" small areas.

aged area. You'll probably want to practice on a coffee can before attacking your car. Using the dotting fashion, fill the nick, chip or scratch. Don't try to brush in the paint or blend it in. Just add tiny dots of paint until the area has been filled.

The new paint may not quite match the original because the weather has faded the finish. Also, metallic paints are almost impossible to match, so don't expect too much. That's another reason for dotting in the paint: The less paint you smear around, the less noticeable the job.

Once the touch-up paint has dried, use a cleaner — not a cleaner/polisher combination — to thoroughly clean the entire finish. If your paint is in excellent shape it is OK to use a cleaner/polisher, but you'll still need a separate wax coat.

After using the cleaner, seal the surface with a high-quality wax. If you can't see yourself spending hours rubbing on the finest, hardest paste wax, then use one of the liquid ones. While the liquid waxes are easy to apply, they don't produce the same results.

It's best to apply wax in the shade to a cool car, even though some waxes are designed to be put on in either sunlight or shade.

Always apply the wax to a soft cloth or an applicator; never directly to the finish. Turn the cloth often and replace it or the applicator when too caked with residue. When the wax has dried to the point where the residue comes off easily, buff the wax to its final shine with a terrycloth or turkish towel.

Use only one side of the towel and get a clean towel when the one being used is dirty.

Use different towels for cleaning the glass than those used to wash the finish.

After washing an area, pull a clean, soft, dry towel with an equally deep nap across the wet area until it is dried.

Silicon surface sealants may be used, but these require a base coat that must be applied instead of wax. If the car has already been waxed, the wax will have to be completely removed with a solvent before the base coat can be applied. After the base sealant coat is applied, there is a conditioning coat to be applied.

There are special products for cleaning and polishing chrome trim and bumpers. Use them because cleaning rusty chrome is real work.

Use a vinyl cleaner and a small scrub brush on vinyl tops. After rinsing completely, apply a good vinyl protectant. Car waxes will leave a white residue in the grain, so don't use them on vinyl tops.

Wheels and tires are best cleaned after washing the rest of the car. Use a big brush first and then go after the whitewalls and raised white-letters with a smaller, stiffer one. A steel wool pad and household soap will improve the whiteness just as well as the special chemicals sold specifically for the job.

Once the tires are clean and dry, spray them with a silicone protectant and wipe off the excess with a cloth. The tires not only look better when treated this way, they last longer because they are protected against ozone, oxygen and ultraviolet rays which crack and check sidewalls.

Standard wheels are easy to take care of: Wash and wax. However, chrome, aluminum and alloy rims aren't so easy. There are many good products available for cleaning and protecting these wheels. Some of the newer wheels even come clear-coated so the only attention they need is soap and water.

The best way to keep the interior of the vehicle in good condition is to vacuum it weekly with one of the heavy-duty units at a coin-operated car wash. A shop model vacuum will also provide the sucking power necessary, whereas few household models can.

Seats should be vacuumed regularly as well as treated with a vinyl or leather protectant. Fabric interiors are not easy to care for, but there are special products available to help.

Another thing that will help protect the appearance of the interior is covers. For the seats, sheepskins are best and they are also very comfortable. For the carpet, good floormats make sense.

Door panels are usually easy to clean with a scrub brush, and soap and water. As with everything vinyl, spray on some protectant to keep the panels looking good.

To help prevent sun-cracking of the dash, keep it clean and treated with a silicon protectant. Spray this protectant into a cloth and then apply to the dash, since any overspray in this area would get onto the windshield and leave a film.

Yes, the windshield. After washing the car, use a glass cleaner on the glass to remove any film inside and out. When cleaning rear windows be especially careful not to break any of the defroster element wires. The plexiglass windows in convertible tops require special attention with plexiglass cleaners or they will become cloudy.

If pride of ownership isn't enough to encourage you to keep your car clean, consider that a well-maintained car is worth more at trade-in time.

As with any washing job, you start at the top and work your way down.

When you're done you'll have a clean car, a couple of wet towels that are also dirty and a couple of damp towels. With a small car like this you'll have spent 20 minutes on the entire job and used only one bucket of water.

BACKfire
LETTERS to the EDITOR

EXPECT THE UNEXPECTED

It was the 28th of May, Memorial Day. My family and I had just returned from a weekend camping trip. The weather was beautiful — sunny, warm, with blue skies — a perfect day. I should have stayed home and relaxed but decided instead to work on my 1979 Honda GoldWing GL1000. I'd just put a new battery in it and was going for a short ride to charge it up. I was about three miles from home when it happened.

I was traveling about 40 mph on a 2-lane country road. There was an oncoming car that had just crested a small hill ahead of me. In the few quick seconds before the car and I had passed each other, a full-grown black Labrador retriever ran across the road in front of the automobile. The car slammed on its brakes to avoid hitting the dog. It was too late for me to do anything but prepare — if that is possible — for the inevitable crash about to take place. I hit the dog broadside with my front wheel. I remember a kind of dull 'thud' sound as the dog, motorcycle, and myself became entangled. The next instant the bike was on top of me as we went sliding down the road. The bike then flipped over into the ditch along with the dog.

I continued sliding on the road another 30 feet or so, leaving several layers of skin on the pavement. I finally came to a stop in the ditch, landing in a brushy area. Luckily, the driver of the automobile stopped to see if I was injured. Needless to say, I was. I could hardly breathe or talk. I was bleeding and I hurt. An Aid car came from the local fire department, who called an ambulance that transported me to the nearby Madigan Army Hospital at Fort Lewis. I was treated for multiple abrasions, pulled muscles and a broken toe.

Notice I have not mentioned any head injuries. I was wearing a full-face helmet, which I firmly believe saved my neck, literally. My bike was totalled. The dog was dead. I had on my helmet, a T-shirt, jeans and boots. If I had on all my protective clothing, I believe there would have been few if any injuries. I was an experienced rider, with 19 years of biking. The moral? Expect the unexpected. I was lucky — this time.

TSgt. Mark . Vogelbacher, ANG
Camp Murray, Tacoma, WA 98430

COOLANT DRAINING

Your June 1984 article, "All-Seasons Coolant," omitted a highly significant safety issue associated with most coolants: The effects of ethylene glycol on children, pets and the environment.

Ethylene glycol is a poison to warm-blooded animals, and it tastes sweet. By just draining a cooling system onto the ground, as shown in your article, puddles of the stuff can be left around for birds, pets and, God forbid, even children to "taste test."

There are also usually local ordinances which prohibit dumping of chemicals, including ethylene glycol, into storm sewers where it can flow into the water table. The mixture does no good for waste treatment plants, according to our country's sanitary engineering department.

In short: Check your local laws on draining the stuff onto the ground. If you do drain it onto the ground, hose the area down thoroughly to wash away and dilute the ethylene glycol. If it's illegal to drain the stuff into the water table or through the sanitary sewer system, use a catch basin, collect it, and take it to a service station for disposal.

Don't risk loss of life or pollution of your water just because "it's less of a hassle."

Capt. Bruce E. Lewis, Jr., USAF
Wright-Patterson AFB, OH 45433

You're right, we didn't mention the environmental hazards of draining coolant and we should have. Although you can't tell it in the photos we weren't draining the old coolant on to the ground. It was be-

Address your letters to:
Editor
DRIVER Magazine
AFISC/SEDD
Norton AFB CA 92409

ing drained in a wash rack with drain lines and catch basins designated for such work.

OOPS!

DRIVER is timely, interesting and informative. The June issue is no exception; however, I would like to call attention to an unsafe practice recommended in the "Backyard Mechanic," page 24. The caption for the lower-left picture would have one inspecting hoses and belts with the engine running. The safety implications are obvious. Also, it is difficult (impossible?) to check a spinning drive belt, even at idle speed.

Keep up the good work. Your publication really is excellent.

Col. Charles B. West, USAF
Pope AFB, NC 28308

Oops! You're right. That's what happens when we attempt to include too much information in one photo and caption. To try to check a moving fan belt could leave you worse off than our tech editor who types using six fingers, three from each hand, attaining up to 40 words per minute when not required to form sentences.

THINK ABOUT IT

You frequently talk of injury and death due to accidents, which cannot be over-emphasized. I enjoyed your May 1984 issue on the response to wearing helmets to reduce injury. It certainly helps. I would like to add another perspective. I have seen many young men brought into the emergency room after accidents without helmets. Most had minor cuts and scrapes that do not require admission but they were admitted for one reason. They were comatose or had been unconscious at the scene of the accident. Fortunately most were not seriously injured but the mandatory skull and neck X-rays, CAT scan and neurology consult cost thousands of dollars when a helmet would have made these unnecessary.

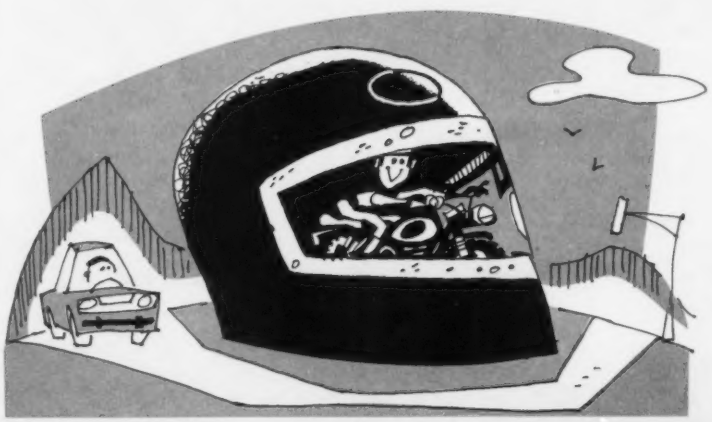
The most pathetic of all were those who did not regain consciousness.

At first, friends and family would be in constant attendance but this would dwindle to just parents after a few weeks. They would often keep their lonely vigil for months watching their son waste away from 150-200 lbs to less than 80 before finally dying, usually of pneumonia. They were then left with months of painful memories and hospital bills that could easily be over $50,000.

Do you want to put your loved ones through that ordeal? Think about it next time you ride without a helmet.

William L. Jones, M.D.
Wichita Falls, TX 76309

P.S. — I wear a helmet if I ride around the block.



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Are Their eyes on the BALL?

The U.S. men's volleyball team used this San Diego beach to practice for the summer Olympics. But they didn't really move the ball with their Ford Bronco II. Top athletes like these spend too much effort on physical conditioning to risk getting hurt accidentally off the court. You can bet they sit down and buckle up before the vehicle starts to move.